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## Assessing the health impacts of adults' participation in sports: investigating the role of accessibility to sport facilities

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The health benefits of individual and group participation in sports are well-known. While a positive association between participation in sport and self-assessed health has been reported for England and Scotland, research has been limited in Wales. In addition, research examining the relationship between levels of physical activity and the accessibility of sport facilities give inconsistent findings.

This research project proposes to explore the potential association between the accessibility of sports facilities, sport participation and health. In particular, we will examine whether:

- Accessibility to sport facilities contributes to participation in sporting activities.
- Sports participation mediates the association between accessibility to sport facilities and health outcomes (as recorded in routine-health-records).
- The association between participation in sports and health is independent of individual characteristics such as gender, socio-economic characteristics.

The data-sets used were: the Welsh Demographic Service Data (WDSD), the Patient Episode Database for Wales (PEDW), the Sport Wales Active Adults Survey (AAS) and Enhanced Recreational Database (ERD). Accessibility measures were derived from the SWERD, while the Charlson Comorbidity Index (CCI) was estimated as an indicator of general health based on PEDW data. The AAS was then linked to PEDW and the ERD. Appropriate regression analysis was applied based on the type of outcome explored.

Preliminary results showed that 72% of the adults participated in sports in the 4 weeks prior to interview and 39% of them participated 3 or more times. Accessibility to sport facilities was significantly associated with outdoor sport activities rather than indoor activities. Distance to a sports hall was significantly associated with sport participation. Adults with a chronic condition based on CCI were less likely to participate in sports. The study provided a unique opportunity to

explore the benefits of analysing linked administrative and survey data, therefore contributing to current research on sport participation/accessibility and health.

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